

SECTION 1: Chemical/Physical Parameters Listing and Delisting Status

Physical/chemical data has been one of the Department's principal indicators of water quality for many years. SWQSs exist for many of the chemical parameters and standardized sampling and analytical protocols have been developed to ensure consistent data quality. This group of parameters can be divided into conventional pollutants (e.g. dissolved oxygen, pH, temperature), sanitary quality (i.e., pathogens), and toxics (priority pollutants, metals, organics, and unionized ammonia).

Metals:

Many old listings for metals were based on data collected prior to the development of "clean technique" sampling and analysis methods. Such data could possess significant amounts of error and yield inflated values, not reflecting actual metal concentrations within the environment. In response to this issue as well as to issues surrounding the preferred flow conditions under which to sample, an Interagency 303(d) Technical Workgroup comprised of representatives from NJDEP, USEPA Region II, and USGS were tasked with developing a sampling and assessment procedure for metals. This workgroup developed a procedure taking into account, preferred flow conditions, the use of clean techniques and the use of dissolved versus total recoverable forms of the metal. The assessment process and requirements are discussed in Section 4.2.2 and Appendix V of the Integrated Water Quality Monitoring and Assessment Methods Report. This metals procedure was applied in assessing both the results from the previous NJ Impaired Waterbodies List and results from current data.

Aluminum, Beryllium, and Iron:

The 1998 303(d) List includes waterbodies that were identified as impaired for aluminum, beryllium, and iron. Beryllium was based on criteria proposed by NJDEP that was later withdrawn; and iron listings were based on exceedences of Drinking Water Secondary Maximum Contaminant Levels. The secondary MCL is provided for taste and odor considerations only, as the iron does not pose a threat to human health. Since NJDEP and Federal SWQS do not include criteria for aluminum, beryllium, and iron, all waters previously listed on the 1998 303(d) List were delisted from the 2002 Integrated List.

Fish Tissue Data:

The Department had originally placed fish consumption advisories where data was more than 10 years old (PCBs, Dioxin and chlordane) on sublist 3. NJDEP has since changed the listing of these advisories from Sublist 3 to Sublist 5 for the Second draft of the Integrated Report (34 N.J.R. 2868) based upon requirements from USEPA. The PCB/Dioxin listings primarily apply to the NY-NJ Harbor (HEP) and Delaware Estuary Programs (DELEP).

Regarding lakes listed for mercury caused by atmospheric contamination, the Department believes that Sublist 4b is the appropriate listing for lakes impacted by atmospheric mercury. However, USEPA has required that states place these waters in sublist 5 with a low priority for TMDL development. New Jersey's Integrated List has been modified to reflect this.

Shellfish:

Coastal waters classified as 'prohibited' for the harvesting of shellfish can be grouped into two categories: 1) waters where harvesting is prohibited due to poor sanitary quality, and 2) waters where sanitary quality may be sufficient to support shellfish harvesting but local activities might render the water unsuitable for harvesting at any time. The former represent the vast majority of "prohibited" waters and these are listed in Sublist 5. The latter closures are termed "administrative closures," are precautionary and represent a relatively small body of waters. There are three listing options for these waters.

Administrative closures are established around potential pollution sources, such as sewage outfalls and marinas as a preventive measure to prevent harvesting from regions that are vulnerable to contamination from sewage bypasses or breaks in outfall pipes (at outfalls) or from contamination from boat wastes and runoff (marinas).

In addressing administrative closures, USEPA's guidance on the use of shellfish classifications in 303(d) decisions states that waters classified as "Prohibited" due to administrative closures should not be classified as "impaired" if data are not available to document an impairment (USEPA, 2000). In response, the Department has applied the following protocol for listing. Where closings are based on land use (i.e. the presence of marinas, STP outfalls etc.) and there is sufficient water quality data to assess attainment, attainment status is labeled "assessed" and the water is listed based upon the support or nonsupport of the use. Where there is insufficient data to assess attainment, these areas are identified as "not assessed."

Replaced Sites and Re-evaluations of Spatial Extent

The 1998 303(d) List contains listings for large River Reach File I (RRI) segments with no identifier as to monitoring location from which data was collected to support the listing. Such entries were often based upon 304(l) data collected during the 1980's. In generating the 2002 Integrated List, the Department selected current sites which were considered representative of these reach segments and listed these reaches in the 2002 List based upon data from these sites. This resulted in the RRI segments being renamed in the 2002 list based upon the name of the current site used to characterize it in 2002. Also in many cases, large reaches listed in 1998 have been broken up into smaller segments in 2002, each being independently listed. In order to highlight this change and avoid confusion, such instances are shown in the Comparison Document by delineating the original 1998 List label followed by the new 2002 identifiers that serve to characterize the reach now.

Also in 1998, some non tidal river segments were listed based upon monitoring locations that are now no longer active. These segments are characterized in 2002 by new sites that lie in close proximity to the older discontinued sites. For example; *Raritan River at Raritan* has been replaced with *Raritan River at Manville*. These changes are indicated in Table 1-1 by indicating the site name used in 1998 and the new site employed in 2002.

Discontinued Sites

On the 1998 303(d) List, 21 chemical sites were discontinued from the ambient surface water monitoring network and their assessment results were carried over to the 2002 Integrated List. The following is the list of discontinued sites:

01367700	Wallkill River At Franklin
01378500	Hackensack River At New Milford
01387000	Wanaque River At Wanaque
01389130	Passaic River At Sigac
01391200	Saddle River At Fairlawn
01396800	Spruce Run At Clinton
01399200	Lamington River Near Ironia
01401440	Millstone River At Kingston
01402540	Millstone River At Weston
01405400	Manalapan Brook Near Spotswood
01407750	Shark River Near Neptune City
01407760	Jumping Brook Near Neptune City
01455500	Musconetcong River At Lake Hopatcong
01455801	Musconetcong River At Lockwood
01461300	Wickecheoke Creek At Stockton
01465970	NB Rancocas Creek At Browns Mills
01467120	Cooper River At Lindenwold
01467140	Cooper River At Lawnside
	Mullica River At Green Bank
	SB Rancocas Creek At Hainesport
	Salem River At Courses Landing

Table 1-1

Table 1-1 lists, alphabetically by waterbody name, all conventional, toxic, and fish advisory (excluding lakes) assessments previously listed on the 1998 303(d) List. The waterbody name and reach location of the 1998 303(d) listing is provided along with the parameters that placed the site on the 303(d) list. The table additionally shows the 2002 station name/waterbody and site ID associated with the old listing. The last two columns list the parameters that remained on sublist 5, and the rational code if a parameter(s) was delisted, respectively. The explanation of the parameter codes is described in the “Summary of Delisting Rational” section above.